



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 016778/0421

Applicant: Ulrich FABER  
Title: WIRELESS COMMUNICATION DEVICE AND METHOD OF  
PREDICTING A FRAME RATE IN A CDMA COMMUNICATION  
SYSTEM  
Serial No.: 09/730,545  
Filed: December 7, 2000  
Examiner: Unknown  
Art Unit: 2681

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**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §1.56 and 37 CFR §1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Submitted herewith on Form PTO SB/08 is a list of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR 1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR 1.97 and 1.98.

The submission of any documents herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie prior art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The instant Information Disclosure Statement is believed to be filed in accordance with 37 C.F.R. 1.97(b), prior to the mailing date of a first Office Action on the merits (first scenario). If that is not the case, such as in a second scenario in which a first Office Action on the merits has been mailed before the filing of the instant Information Disclosure Statement, then either a certification or fee is required, and a certification is provided below. If neither of the first or second scenarios is the case, such as if a final Office Action or a notice of allowance has been mailed by the PTO (third scenario), then both a certification and fee are required, and in that case a certification is provided below and also the PTO is authorized to obtain the necessary fee to have the instant IDS considered, from Foley & Lardner Deposit Account #19-0741.

**CERTIFICATION**

The undersigned hereby certifies in accordance with 37 C.F.R. §1.97(e)(1) that items of information A3 - A12 listed on the Form PTO SB/09 submitted with this Information Disclosure Statement were first cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Statement. Item of information A1 is a U.S. patent that is a counterpart to item of information A9, and item of information A2 is a U.S. patent that is a counterpart to item of information A10.

**RELEVANCE OF EACH DOCUMENT**

A translation of a portion of a Japanese Office Action that issued February 12, 2003 with respect to a counterpart Japanese patent application is provided below.

**"Reason B**

The invention described in the following claims of this application was based on an invention described in the following publications, which had been distributed in Japan or abroad prior to the submission of their application, and could have been easily devised by a person having a normal level of knowledge of the field

of technology to which the invention belongs. For these reasons, it cannot be awarded a patent based on the stipulations of Article 29, Section 2 of the Patent Law.

(Concerning Reason B)

Claims: 1, 2, 4-6

Cited Literature: 1 and 2

#### Comments

In the variable data rate communications in Cited Literature 1 (Claims 1-3 and Figures 1 and 8), is a description of the detection of open slots from variations in the level of reception and that data demodulation operations are stopped in the empty slots that are detected.

A comparison of the invention described in Claims 1, 2, and 4-6 of the application with the invention described in Cited Literature 1 reveals the following difference. The invention described in Claims 1, 2 and 4-6 predicts the frame rate of the subsequent frame based on statistical data of the frame rate of the decoded frame received before it. In contrast, the invention described in Cited Literature 1 does not mention the prediction frame rate of the subsequent frame based on the statistical data of the frame rate of the previously decoded frame.

Cited Literature 2 (Claims 1-5 and Figure 1) describe the technological concept of assessing the rate based on the statistics from the results of past rate assessments. This corresponds to predicting the frame rate of the subsequent frame based on the statistical data of the frame rate of the frame(s) that was/were previously received and decoded.

The inventions described in Cited Literature 1 and 2 both belong to the field of technology pertaining to receivers that assess variable rates on the receiving side. As such, by using the technological concept described above in Cited Literature 2 as a means for detecting empty slots in the invention described in Cited Literature 1, it would have been easy for the party in question to devise a configuration like the one described for the invention in Claims 1, 2 and 4-6 of this invention.

Claims: 3

Cited Literature: 1-3

### Comments

In the variable rate communications system, the slots in which the transmission data is to be placed are mapped in relation to the transmission rate. In other words, it is no more than a data burst randomizer that carries out the mapping of the empty slot positions, which is a known technology (for example, Figure 1 in Cited Literature 3).

### List of Cited Literature

1. Japanese Unexamined Patent Application Publication H11-55218
2. International Publication Pamphlet 98/19431
3. International Publication Pamphlet 98/13941

### Record of Prior Art Literature Search Results

Fields searched - IPC 7<sup>th</sup> Edition - H04J - 13/00-13/06  
H04B - 1/69-1/713  
H04B - 7/24  
H04Q - 7/38

### Prior Art Literature

Japanese Unexamined Patent Application Publication H11-163962 (Focusing frame rates estimated based on the frame rates of the previous frame and the frame before that.)

Japanese Unexamined Patent Application Publication 2000-165351 (Using frame rates based on the codec data and decoding results, the next frame rate is predicted and searcher operations are stopped for empty slots with respect to the frame rate using a data burst randomizer.)

Japanese Unexamined Patent Application Publication 2000-295119 (Principle of the Data Burst Randomizer)

International Publication Pamphlet No. 97/24848 (The value W is calculated based on data burst randomizers, algorithms, and the SNR of the relative values in each of the slots. Then, the W error is calculated for each frame rate and the frame rate assessment selects the rate where the calculated result is the smallest.)

International Publication Pamphlet No. 98/13941 (data burst randomizer, rate estimation, CRC)

Japanese Unexamined Patent Application Publication H11-220778 (Empty slot detection, break point)

Japanese Unexamined Patent Application Publication H10-164003 (Full rate, half rate, peak period)

Japanese Unexamined Patent Application Publication 2000-224651 (Full rate priority, call receipt control)

Japanese Unexamined Patent Application Publication H11-150522 (Estimation of data rate from each relative value according to the repeat data count.)

This Record of Prior Art Literature Search Results does not constitute a reason for rejection, but this does not preclude its use as an example of widely known techniques with respect to revisions."

Applicant's statements regarding the Japanese Office Action are based on a partial translation that Applicant's representative obtained. These statements should in no way be considered as an agreement by Applicant with, or an admission of, what is asserted in the Japanese Office Action.

Applicant respectfully request that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form-SB08 be returned in accordance with MPEP §609.

Respectfully submitted,

12 May, 2003  
Date

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Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees; and applicant(s) hereby petition for any needed extension of time.